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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/909,553 | 07/20/2001 | Terence F. Kelly | 067808:0113 | 2566 |

22922 7590 10/03/2005

REINHART BOERNER VAN DEUREN S.C.
ATTN: LINDA GABRIEL, DOCKET COORDINATOR
1000 NORTH WATER STREET
SUITE 2100
MILWAUKEE, WI 53202

| EXAMINER | |
|---|---|
| AMINI, JAVID A | |
| **ART UNIT** | **PAPER NUMBER** |
| 2672 | |

DATE MAILED: 10/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 09/909,553 | KELLY ET AL. | |
| | Examiner | Art Unit | |
| | Javid A. Amini | 2672 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *18 July 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☐ Claim(s) _____ is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,3-5,7-9,11,13,14,16,17 and 19-29* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *7/18/05;10/8/04;* 7-2-01
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

***Response to Arguments***

Applicant's arguments filed 7/18/2005 have been fully considered but they are not persuasive.

Applicant on pages 8-9 of the remarks describes the claim invention from independent claim 1. Applicant under summary of the invention paragraph 0009 discloses that "the present invention may be (Examiner's note: the auxiliary verb "may" is not a strong auxiliary verb, because it's simply interpreted as the present invention may not be) employed to produce a dynamic weather presentation including integrated time-lapse video of evolving sky conditions in combination with a time synchronized dynamic graphical presentation of weather condition information". Applicant on page 9 argues that the two references do not describe or suggest such a combined graphical information and time-lapse photography presentation. Applicant on the same page discloses a definition of "time-lapse".

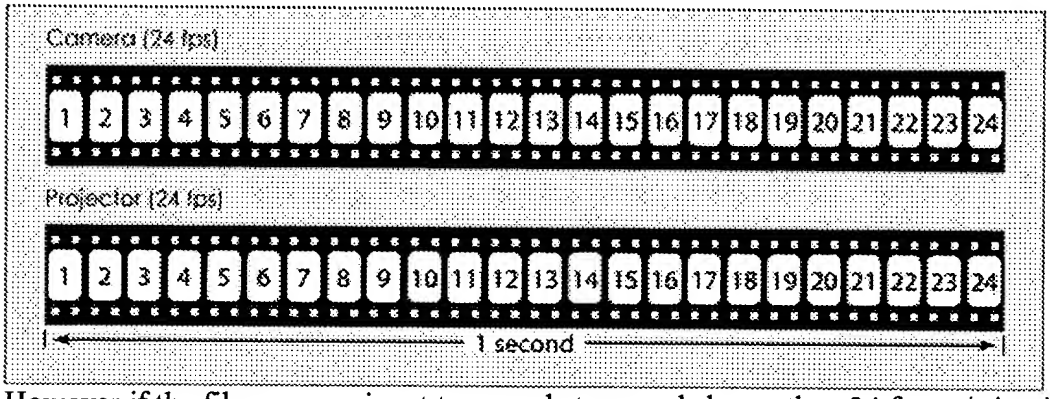
Examiner's concern: A person skill in this art should be familiar not only with the definition of the " Time-Lapse" but also with the concept of the "Time-Lapse". The following explanation does not consider as a new rejection, it's just for reminding the first use of "Time-Lapse" was on 1897 (i.e. more than 100 years ago). Time-lapse photography is a cinematography technique whereby each film frame is captured at a rate much slower then it will be played back. When replayed at normal speed, time appears to be moving faster and thus lapsing. Processes that would normally appear subtle to the human eye, such as motion in the sky, become very pronounced. Time-lapse is the extreme version the cinematography technique of undercranking.

Some classic subjects of time-lapse photography include:

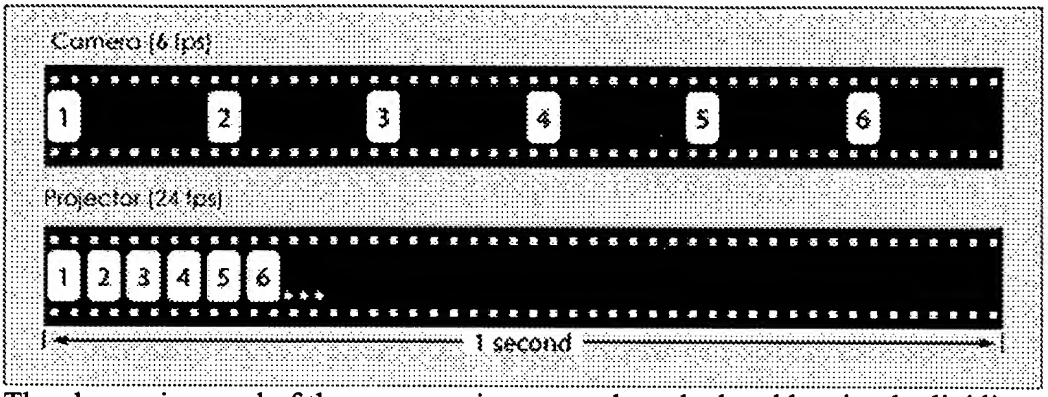
- Cloudscapes and celestial motion
- Plants growing and flowers opening
- Fruit rotting

The technique has also been used to photograph crowds, traffic, and even television. The effect of photographing a subject that changes imperceptibly slowly is to create a smooth impression of motion. The first use of time-lapse photography in a feature film was in Georges_Melie's motion picture Carrefour De L'Opera (1897).

How Time-Lapse Works : Film is normally projected at 24 frames per second. Meaning that 24 images appear on the screen every second. Under normal circumstances a film *camera* will record images at 24 frame/s. Since the projection speed and the recording speed are the same the images onscreen appear to move normally.




However if the film camera is set to record at a speed slower than 24 frame/s it will still be projected at 24 frame/s. Thus the image on screen will appear to move faster.

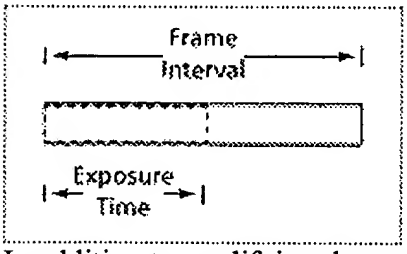



The change in speed of the onscreen image can be calculated by simply dividing the projection speed by the camera speed.

$$PerceivedSpeed = \frac{ProjectionSpeed}{CameraSpeed}$$

so for example, a film that is recorded at 12 frames per second will appear to move twice as fast. Shooting at camera speeds between 8 and 24 frame/s is usually referred to as undercranking. Shooting at slower speeds is referred to as time-lapse. The same principles apply to video and other digital photography techniques, however most video cameras do not have variable frame speeds. Time-lapse can be achieved with normal movie cameras, though often the camera must be modified with a device called an intervalometer. The intervalometer regulates the motion of the camera according to a specific interval of time between frames.

Short Exposure vs. Long Exposure Time-lapse

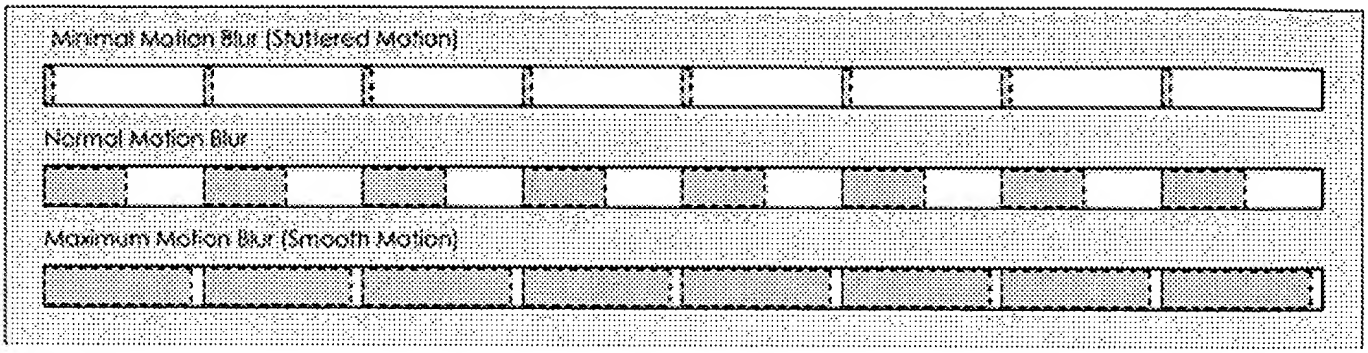



In addition to modifying the speed of the camera it is also important to consider the relationship between the frame interval and the exposure time. This relationship essentially controls the

amount of motion blur present in each frame and it is, in principle, exactly the same as adjusting the shutter angle on a movie camera.

Here is how it works:

A film camera normally records film at twenty-four frames per second. During each 24th of a second the film is actually exposed to light for roughly half the time. The rest of the time it is hidden behind the shutter. Thus we normally calculate exposure time for motion picture film to be at one 48th of a second (1/48 sec often rounded to 1/50 sec). Adjusting the shutter angle on a film camera can add or reduce the amount of motion blur by changing the amount of time that the film frame is actually exposed to light. In time-lapse photography the camera records images at a specific slow interval such as one frame every thirty seconds (1/30 frame/s). The shutter will be open for some portion of that time. In short exposure time-lapse the film is exposed to light for a normal exposure time over an abnormal frame interval. So for example the camera will be set up to expose a frame for 1/50th of a second every 30 seconds. Such a setup will create the effect of an extremely tight shutter angle giving the resulting film a stop-animation or clay-motion quality. In long exposure time-lapse the exposure time will approximate the effects of a normal shutter angle. Normally this means that the exposure time should be half of the frame interval. Thus a 30 second frame interval should be accompanied by a 15 second exposure time to simulate a normal shutter. The resulting film will appear smooth.




You can calculate the exposure time based on the desired shutter angle effect and the frame interval with the equation:

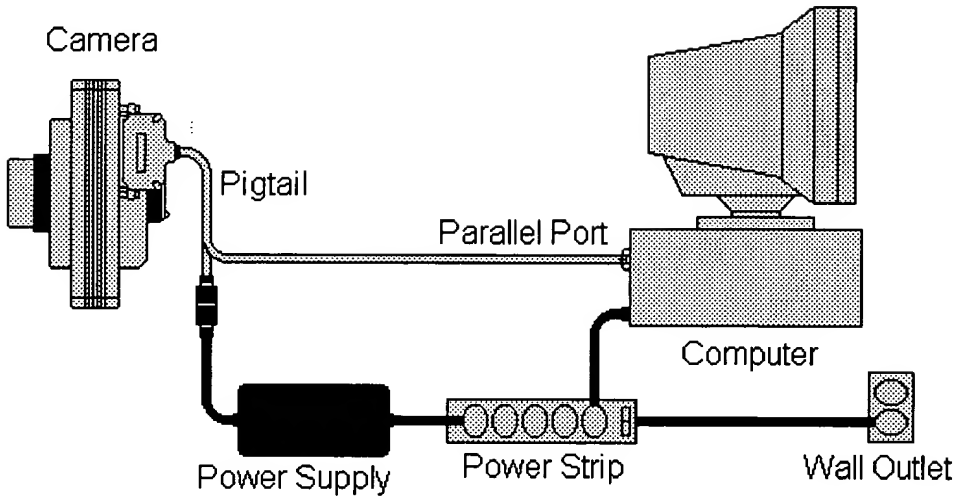
$$ExposureTime = \frac{ShutterAngle}{360^{\circ}} \times FrameInterval$$

Long exposure time-lapse is less common because it is often difficult to properly expose film at such a long period especially in daylight situations. A film frame that is exposed for 15 seconds will receive 300 times more light then its 1/50th of a second counterpart. (Thus it will be more then 8 stops over normal exposure.) A scientific grade neutral density filter can be used to alleviate this problem.

Shelton at col. 7, lines 21-39 discloses that the base computer 4 in fig. 1, sends the output signal 14, corresponding to screen display data, to the monitor 10, and also to a conventional NTSC/Genlock signal processor 16 which converts the screen display signal 14 into a television broadcast quality video signal 18 in a conventional manner. Video signal 18 is then routed through conventional television broadcast equipment to the end users, i.e. to television viewers. Thus, for example, the video signal 18 from the NTSC/Genlock signal processor 16 goes to a master control switcher 20 which accepts video signals from various other sources (not shown) and selects which of said signals 19 will be broadcast to viewers at any given instant. The

selected signal 19 goes to a microwave relay tower 22, which relays the selected signal 19 to a television broadcast antenna 24, for broadcast to reception antennas 26, 28, 30 of viewers 32, 34, 36. Thus, the image transmitted to the viewers 32, 34, 36 at any given instant is the image appearing on the base computer monitor 10. Knowing that the reference Shelton at col. 13, lines 41-50 teaches a HHC includes a keypad which allows random access to the screens shown in windows 208 and 209 when the HHC is connected to the parallel port of the base computer 4. The software is flexible so that the user can modify the input and output options to suit his particular needs. At the same col. lines 56-65 teaches settings for the HHC; enable/disenable the HHC; adjust the sampling rate of data from remote sites (see Examiner's note); set parallel port values (see Examiner's note); keypad enable/disenable. Using the controller slows overall operation somewhat, which is why the option exists to disable it when not in use.

Examiner's note: the connectivity in fig. 2, between "base computer" and "video camera" labeled 82 via a parallel port, as follows: The parallel port cameras come with a 25' cable to be attached to the parallel port on the back of your computer. Also included is a 12V power supply that attaches to the pigtail on the camera end of the parallel port cable. When connecting the camera to the computer, first connect the 37-pin connector of the cable to the camera, and then connect the camera's pigtail (round 5-pin connector) to the DC side of the power supply. Plug in the AC side of the power supply to a wall outlet (camera fans should come on). Lastly, plug the 25-pin connector into the parallel port of your computer. See figure below.




Examiner's note: the sampling rate of data defines the number of samples per second taken from a continuous signal to make a discrete signal. The inverse of the sampling frequency is the sampling period or sampling time, which is the time between samples. The discrete signal is a sequence of samples.

Applicant on page 10, lines 3-18 argues that neither of the cited references discuss a time-lapse photography.

Examiner's reply: The references do not explicitly specify the term time-lapse photography, however, the reference Shelton in fig. 2, illustrates a video camera 82, *id.* The software for Davis instruments is flexible so that the user can modify the input and output options to suit his particular needs. One of the options is the sampling rate of data that can produce a discrete signal, *id.* the HHC 5 can control the discrete signal in fig. 1 to modify the input and output options to suit his particular needs, e.g. time-lapse photography. The second reference Ryan in fig. 12(L) illustrates map motion controls (slow, fast), i.e. considered as a time-lapse photography.

Examiner's suggestion: Applicant needs to specify more in detail about the time-lapse photography.

Applicant on page 11, lines 9-16 argues that the reference Shelton no where describe that the video images and numerical, textual or graphical data that may be superimposed thereon be time synchronized in any manner.

Examiner's reply: Shelton at col. 3, lines 50-67 discloses that the base computer is programmed with Windows-based (or the like) software, multiple files can be running simultaneously on the base computer. In practice, this means that the system can be used in a live television weather broadcast where the broadcast can be switched from screen to screen without interruption, where each screen is the output of a separate file. Thus, the broadcast can display sequential real time weather data screens from different weather sites around the viewing area. For example, a weather broadcast in Reno could show--in rapid, real time sequence--weather data such as temperature, rainfall, snowfall and wind speed-from Reno, Incline Village, Donner Pass, Mount Rose, and Lake Tahoe. Since each of these sites has its own weather system, real time weather data from such sites are important to many persons in the Reno viewing area including motorists skiers windsurfers hikers fishermen, and persons engaging in various other endeavors.

Applicant on page 12, second paragraph argues similar to the previous argument.

Examiner encourages Applicant to provide more detailed and substantial information regarding the claim invention, also feel free to schedule an interview.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 3-5, 7-9, 11,13-14, 16-17 and 19-29 rejected under 35 U.S.C. 103(a) as being unpatentable over Shelton, and further in view of Ryan et al (hereinafter referred as a Ryan).

1. Claim 1.

Shelton in fig. 2 illustrates obtaining data including a video camera data box 82 into base computer box 88 and in fig. 7A illustrates a location see number 409 at the certain time, which is similar to the following step (a): "obtaining a time-lapse photography video image sequence of changing sky conditions over a selected time period; Shelton in fig. 5B is a schematic diagram of an alternate embodiment of the computer-based multi-station weather data collecting and reporting system of fig. 1, wherein the output of the base computer, instead of being processed for and broadcast to television viewers, is sent to a multiple video source unit which is, in turn, accessed by multiple local and/or remote end users. Multiple video source units are used to arrange the order the video signals, from different video sources, sent to television distribution systems. Data can be distributed from each site via global satellite transmission. Network users choose from a cross sampling of each national or regional site. This differs from the direct television broadcast in that the broadcaster dials up his site and is limited to it. This allows a user to pull down data without phone transmission. It is designed for cable/satellite

users, which has a similar concept to the following steps (b and c): "recording weather information over the selected time period; generating in a computer a dynamic graphical information presentation of changing weather conditions over the selected time period from the recorded weather information; Shelton in col. 3 lines 20-34 teaches pictures can be stored images or real time images being collected with a video camera at the same time as the weather data is being collected. In this fashion, the system is capable of providing end users with high information content weather images, for example, temperature, rainfall, wind speed and barometric data (in alphanumeric and/or graph expression) superimposed upon a satellite picture of the region in question, or some other picture of interest (e.g., real time or taped video of the rain falling; wind blowing snow, rain or trees; snow drifts; snow control teams in action; hurricanes; tornados; earthquakes; etc.) see following step (d) of the claim: combining the dynamic graphical information presentation with the time-lapse photography video image sequence in a time synchronized manner to form a combined graphical information and time-lapse photography presentation in which both the time lapse video image sequence, the dynamic graphical information presentation change dynamically when the combined graphical information and time lapse photography presentation is played to show simultaneously time synchronized dynamically changing sky conditions and weather conditions over the selected time period". It would have been obvious to a person skill in the art to recognize the time synchronization between video object and the other weather data. In this case the reference Shelton in col. 2 teaches that each weather station normally includes some or all of the following instruments for sensing different weather parameters and the like: thermometer, humidity gauge, barometer, anemometer, rain gauge, water temperature sensor, snow depth

gauge, cloud scanner, earthquake sensor, video camera. Each weather station will normally include one or more analog to digital converters to convert the normally analog signals from the weather sensors into digital signals capable of being stored and manipulated by the base computer. Often one of the weather stations in each system will be connected directly to the base computer, to measure weather conditions at the base, whereas the other weather stations will be positioned at locations remote from the base computer. The remote weather stations communicate with the base computer via voice quality telephone lines, either permanently opens telephone line or a dial up line. Data is stored on a minute-by-minute basis for the entire period during which communication from the base to the remote weather station occurs. If a remote site has a computer, it will download its data files for any time period (such as hour, day, etc.) requested by the base site via phone line/modem. Computer at base site can then process data. Shelton does not explicitly specify the time-lapse photography. However Ryan in paragraph 0067 teaches as shown in fig. 2(B), the "Home" menu item contains links to "Home Page," "Site Map," and "Site Search." The "Forecasts & Maps" menu item preferably contains links to "Local Weather," "World Weather," "School day Forecasts," "Audio/Video forecasts," and "Weather Maps." Ryan in paragraph 0109 teaches a preferred system according to the Ryans' invention allows for the delivery of dynamic content to consumers. Ryan in paragraph 0123 retrieved dynamic data using Java scriplets. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Ryan into Shelton in order to take an advantage of Ryans' java scriplets that would be beneficial to users.

2. Claim 3.

See rejection of claim 1. Ryans' java scriplets would be beneficial to the following step: "combining the time-lapse photography video image sequence and the dynamic graphical information presentation in a time synchronized manner includes the step of time synchronizing the time-lapse photography video image sequence and the dynamic graphical information presentation such that the perceived speed of both the time-lapse photography video image sequence and of the dynamic graphical information presentation accelerates at a beginning of the combined graphical information and time-lapse photography presentation and decelerates at an end of the combined graphical information and time-lapse photography presentation at the same rate".

3. Claims 4 and 5.

Ryan in figs. 12 illustrates the step of "combining a time-lapse clock display with the combined graphical information and time-lapse photography presentation"; "generating the dynamic graphical information presentation includes the step of generating the time-lapse clock display".

4. Claims 7-9, 11,13-14, 16-17 and 19-29.

See rejection of claim 1.

***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Javid A. Amini whose telephone number is 571-272-7654. The examiner can normally be reached on 8-4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Razavi can be reached on 571-272-7664. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JEFFERY BRIER
PRIMARY EXAMINER

Javid A Amini
Examiner
Art Unit 2672

Javid Amini